



# **STIC Search Report**

## **EIC 2600**

**STIC Database Tracking Number: 111403**

**TO: Gautam Patel**  
**Location: PK2 3Y13**  
**Art Unit: 2655**  
**Monday, January 05, 2004**

**Case Serial Number: 09/944098**

**From: Pamela Reynolds**  
**Location: EIC 2600**  
**PK2-3C03**  
**Phone: 306-0255**

**Pamela.Reynolds@uspto.gov**

### **Search Notes**

Dear Gautam Patel,

Please find attached the search results for 09/944098. I used the search strategy we discussed. I searched the standard Dialog files.

If you would like a re-focus please let me know.

Thank you.

Pamela Reynolds

L Number	Hits	Search Text	DB	Time stamp
1	7722	focus near6 error	USPAT; EPO; JPO	2004/01/05 11:27
2	949	(focus near6 error) same (four quadrant quadrise\$3)	USPAT; EPO; JPO	2004/01/05 12:15
3	117	((focus near6 error) same (four quadrant quadrise\$3)) same (perpendicular radial)	USPAT; EPO; JPO	2004/01/05 11:29
4	62	((focus near6 error) same (four quadrant quadrise\$3)) same (perpendicular radial)) same (track tangent\$4)	USPAT; EPO; JPO	2004/01/05 11:33
5	10	((focus near6 error) same (four quadrant quadrise\$3)) same (perpendicular radial)) same (track tangent\$4)) same cylindric\$4	USPAT; EPO; JPO	2004/01/05 11:49
6	173	((focus near6 error) same (four quadrant quadrise\$3)) same cylindric\$4	USPAT; EPO; JPO	2004/01/05 11:49
7	163	((focus near6 error) same (four quadrant quadrise\$3)) same cylindric\$4) not (((focus near6 error) same (four quadrant quadrise\$3)) same (perpendicular radial)) same (track tangent\$4)) same cylindric\$4)	USPAT; EPO; JPO	2004/01/05 11:49
8	45329	cylindric\$4 same (four quadrant quadrise\$3)	USPAT; EPO; JPO	2004/01/05 12:16
9	173	(cylindric\$4 same (four quadrant quadrise\$3)) same (focus near6 error)	USPAT; EPO; JPO	2004/01/05 12:16
10	6	((cylindric\$4 same (four quadrant quadrise\$3)) same (focus near6 error)) same ((lenses plural\$4 multipl\$4 second) near4 cylindric\$4)	USPAT; EPO; JPO	2004/01/05 12:17

L Number	Hits	Search Text	DB	Time stamp
1	127302	optical adj2 (device element)	USPAT; EPO; JPO	2004/01/05 15:27
2	283216	(plural\$4 multipl\$4 four quad\$8) near4 (section division quadrant)	USPAT; EPO; JPO	2004/01/05 15:29
3	1650	(optical adj2 (device element)) same ((plural\$4 multipl\$4 four quad\$8) near4 (section division quadrant))	USPAT; EPO; JPO	2004/01/05 15:29
4	118	((optical adj2 (device element)) same ((plural\$4 multipl\$4 four quad\$8) near4 (section division quadrant))) same focus	USPAT; EPO; JPO	2004/01/05 15:29
5	0	((optical adj2 (device element)) same ((plural\$4 multipl\$4 four quad\$8) near4 (section division quadrant))) same focus) same "90"	USPAT; EPO; JPO	2004/01/05 15:29
6	34	((optical adj2 (device element)) same ((plural\$4 multipl\$4 four quad\$8) near4 (section division quadrant))) same focus) same astigmat\$4	USPAT; EPO; JPO	2004/01/05 15:30

L Number	Hits	Search Text	DB	Time stamp
1	7722	focus near6 error	USPAT; EPO; JPO	2004/01/05 11:27
2	949	(focus near6 error) same (four quadrant quadrisect\$3)	USPAT; EPO; JPO	2004/01/05 11:28
3	117	((focus near6 error) same (four quadrant quadrisect\$3)) same (perpendicular radial)	USPAT; EPO; JPO	2004/01/05 11:29
4	62	((focus near6 error) same (four quadrant quadrisect\$3)) same (perpendicular radial)) same (track tangent\$4)	USPAT; EPO; JPO	2004/01/05 11:33
5	10	((focus near6 error) same (four quadrant quadrisect\$3)) same (perpendicular radial)) same (track tangent\$4)) same cylindric\$4	USPAT; EPO; JPO	2004/01/05 11:35

File 2:INSPEC 1969-2003/Dec W2  
     (c) 2003 Institution of Electrical Engineers  
 File 6:NTIS 1964-2004/Jan W1  
     (c) 2004 NTIS, Intl Cpyrght All Rights Res  
 File 8:Ei Compendex(R) 1970-2004/Dec W4  
     (c) 2004 Elsevier Eng. Info. Inc.  
 File 34:SciSearch(R) Cited Ref Sci 1990-2003/Dec W4  
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     (c) 2003 ProQuest Info&Learning  
 File 65:Inside Conferences 1993-2004/Jan W1  
     (c) 2004 BLDSC all rts. reserv.  
 File 94:JICST-EPlus 1985-2004/Dec W4  
     (c)2004 Japan Science and Tech Corp(JST)  
 File 95:TEME-Technology & Management 1989-2004/Dec W3  
     (c) 2004 FIZ TECHNIK  
 File 99:Wilson Appl. Sci & Tech Abs 1983-2003/Nov  
     (c) 2003 The HW Wilson Co.  
 File 144:Pascal 1973-2003/Dec W2  
     (c) 2003 INIST/CNRS  
 File 239:Mathsci 1940-2003/Feb  
     (c) 2003 American Mathematical Society  
 File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
     (c) 1998 Inst for Sci Info  
 File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13  
     (c) 2002 The Gale Group  
 File 603:Newspaper Abstracts 1984-1988  
     (c)2001 ProQuest Info&Learning  
 File 483:Newspaper Abs Daily 1986-2004/Jan 03  
     (c) 2004 ProQuest Info&Learning

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Set	Items	Description
S1	4928	CYLINDRIC? AND (LENS OR LENSES)
S2	357918	(FOUR OR 4 OR QUADRANT?) AND (PARTS OR SECTIONS OR SECTORS OR PARTITIONS OR SEGMENT?)
S3	491461	FOCUS
S4	38774	(NINETY OR 90) ( ) DEGREES
S5	11545	ASTIGMATISM
S6	49	S1 AND S2
S7	1	S6 AND S3
S8	1	S6 AND S4
S9	1	S8 NOT S7
S10	6	S6 AND S5
S11	5	S10 NOT (S7 OR 8 OR S9)
S12	3	RD S11 (unique items)

7/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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6653125 INSPEC Abstract Number: A2000-17-8760B-016, B2000-09-7510H-012

**Title: 2-D arrays [for diagnostic ultrasound]**

Author(s): von Ramm, O.T.

Author Affiliation: Centre for Emerging Cardiovascular Technol., Duke Univ., Durham, NC, USA

Journal: Ultrasound in Medicine and Biology vol.26, suppl., no.1 p. S10-12

Publisher: Elsevier,

Publication Date: 2000 Country of Publication: USA

CODEN: USMBA3 ISSN: 0301-5629

SICI: 0301-5629(2000)26:1L.s10:ADU;1-P

Material Identity Number: F148-2000-005

U.S. Copyright Clearance Center Code: 0301-5629/2000/\$20.00

Language: English

Subfile: A B

Copyright 2000, IEE

...Abstract: the early years of diagnostic ultrasound, single element transducers predominated in pulse-echo equipment. Acoustic **lenses** cemented to the front of the "piston" transducers improved resolution in portions of the image...

... continuously or in appropriate small steps, to keep echoes from the transmitted pulse in constant **focus** as this pulse propagates deeper into the tissues. Dynamic focusing results in improved resolution throughout...

...of the transducer aperture (i.e., for ranges  $Z < Z_{\text{sub T}} = L / \sin^2 \theta$   $4\lambda$ ), where  $L$  is the transducer diameter and  $\lambda$  is the nominal transmitted wavelength. Calculations...

... recently, such systems employed a one-dimensional linear array of transducer elements to steer and **focus** the beam in a sectional or tomographic plane. Focusing in the out-of-plane dimension was either nonexistent or achieved via a fixed **focus cylindrical lens**. A creative approach to this focusing problem was suggested by Macovski and Norton (1975) who...

... array," which featured a central one-dimensional linear array for beam steering surrounded by a **segmented** annular array to provide focusing in all dimensions.

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9/3,K/1 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
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06221600 Genuine Article#: YC729 No. References: 40

**Title: Complex fragment emission in the 200-MeV He- 4 +Ag-nat, Au-197 reactions**

Author(s): Zhang J (REPRINT) ; Kwiatkowski K; Bonser D; Fatyga M; Coon SD; Stith K; Viola VE; Woo LW; Yennello SJ

Corporate Source: INST ATOM ENERGY,/BEIJING 102413//PEOPLES R CHINA/  
(REPRINT); INDIANA UNIV,DEPT CHEM/BLOOMINGTON//IN/47405; INDIANA  
UNIV,DEPT PHYS/BLOOMINGTON//IN/47405; INDIANA  
UNIV,IUCF/BLOOMINGTON//IN/47405

Journal: PHYSICAL REVIEW C-NUCLEAR PHYSICS, 1997, V56, N4 (OCT), P1918-1925  
ISSN: 0556-2813 Publication date: 19971000

Publisher: AMER INST PHYSICS, CIRCULATION FULFILLMENT DIV, 500 SUNNYSIDE  
BLVD, WOODBURY, NY 11797-2999

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

**Title: Complex fragment emission in the 200-MeV He- 4 +Ag-nat, Au-197 reactions**

Abstract: Spectra, angular distributions, and cross **sections** have been measured for Z=3-14 fragments produced in 200-MeV He- 4 -induced reactions on Ag-nat and Au-197 targets. In addition, isotopic yields were measured...

...extending from the emission barrier to momenta in excess of the incident beam. Backward of **90 degrees** the yields are nearly isotropic and exhibit spectra consistent with emission from an equilibrated composite

...Identifiers--MASTER EQUATION THEORY; PREEQUILIBRIUM REACTIONS; NUCLEAR FRAGMENTATION; EXCITATION-FUNCTIONS; CROSS- **SECTIONS** ; MEV HE-3; MASS; ENERGY; MULTIFRAGMENTATION; HE-3+AG-NAT

...Research Fronts: NUCLEAR MULTIFRAGMENTATION; COMPLEX FRAGMENT EMISSION)  
95-2602 001 (SHEARS BANDS; HEAVY-IONS IN SOLIDS; ACTIVE **CYLINDRICAL**  
PLASMA **LENS** CONCEPT)

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12/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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7466926 INSPEC Abstract Number: A2003-01-0630C-010; B2003-01-7320C-013

**Title: Displacement measurement sensor using astigmatic confocal technology**

Author(s): Seo, J.W.; Kang, D.K.; Lee, J.H.; Kim, D.M.; Gweon, D.G.

Author Affiliation: Dept. of Mech. Eng., KAIST, Daejeon, South Korea

Conference Title: ICCAS 2002. International Conference on Control, Automation and Systems p.1572-5

Publisher: Inst. Control, Autom. & Syst. Eng, Taejon, South Korea

Publication Date: 2001 Country of Publication: South Korea CD-ROM pp.

Material Identity Number: XX-2001-01846

Conference Title: Proceedings of 2001 International Conference on Control, Automation and Systems (16th Korea Automatic Control Conference)

Conference Sponsor: Korea Res. Found.; Korea Sci. & Eng. Found.; Korea Nat. Tourism Organ.; Korean Federation of Sci. & Technol. Soc

Conference Date: 17-21 Oct. 2001 Conference Location: Jeju Island, South Korea

Language: English

Subfile: A B

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...Abstract: using the optical probe in scanning probe microscopy (SPM). Application of the confocal theory and **astigmatism** to a displacement measurement sensor is discussed. Object movement can be detected with several tens...

... and object variations. This paper shows mathematical expressions of astigmatic sensor parameters such as the **lens** power in the optical fields and the geometry of the **lens** system. We propose methods for the elimination of odd aberrations concerned with the finite system...

...Descriptors: **lenses** ;

...Identifiers: astigmatic **lens** ; ...

... **four - segments** detector...

... **cylindrical lens** ; ...

...positive power **lens** ; ...

... **lens** system geometry

12/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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6124699 INSPEC Abstract Number: A1999-03-8732Q-002

**Title: Development and validation of a visual acuity chart for Australian Aborigines and Torres Strait Islanders**

Author(s): Wildsoet, C.F.; Wood, J.M.; Hassan, S.

Author Affiliation: New England Coll. of Optometry, Boston, MA, USA

Journal: Optometry and Vision Science vol.75, no.11 p.806-12

Publisher: Williams & Wilkins for American Acad. Optometry,

Publication Date: Nov. 1998 Country of Publication: USA

CODEN: OVSCET ISSN: 1040-5488

SICI: 1040-5488(199811)75:11L:806:DVVA;1-3

Material Identity Number: M887-1998-008



U.S. Copyright Clearance Center Code: 1040-5488/98/7511-0806\$03.00/0  
Language: English  
Subfile: A  
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...Abstract: for these 3 charts and an Illiterate E chart, with refractive blur imposed with trial lenses over habitual distance corrections (spherical: +0.50, +1.00, +2.00, and + 4 .00 D; **cylindrical** : +1.00 and +2.00 D, axes 45, 90, and 180 degrees ). To avoid cultural...  
... study, subjects were selected from the wider Australian population rather than specifically from its indigenous **segment** . Results. Experiment I: The Turtle chart performed most like the Konig Bar chart for this...

... and the Konig Bar chart showing a slower decline in performance, with increasing defocus. All 4 charts showed similar directional biases with astigmatic defocus, being most affected by oblique (45 degrees ) **astigmatism** . It is concluded that the Turtle chart met the criteria set for its validation as...

...Identifiers: trial lenses ;

12/3,K/3 (Item 1 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2003 INIST/CNRS. All rts. reserv.

14442887 PASCAL No.: 00-0101563  
**Implantation of a toric poly(methyl methacrylate) intraocular lens to correct high astigmatism**  
FROHN A; DICK H B; THIEL H J  
Department of Ophthalmology, Eberhardt Karls-University,, Tuebingen, Germany; Department of Ophthalmology, Johannes Gutenberg-University, Mainz, Germany  
Journal: Journal of cataract and refractive surgery, 1999, 25 (12)  
1675-1678  
Language: English

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**Implantation of a toric poly(methyl methacrylate) intraocular lens to correct high astigmatism**

... 57-year-old man experienced a decrease in visual function because of cataract formation. Corneal **astigmatism** was 13.4 diopters (D) because he had had a penetrating keratoplasty 27 years before. Cataract surgery was planned, and biometric data for toric intraocular **lens** (IOL) implantation were collected for the manufacture of a custom IOL. After phacoemulsification, a toric poly(methyl methacrylate) (PMMA) IOL of + 19.0 D spherical and +12.0 D **cylindrical** power was implanted via a sclerocorneal tunnel incision. Three months postoperatively, corneal **astigmatism** was 14.3 D and best corrected visual acuity (BCVA), 20/25. Postoperative refraction (+1...

... No significant IOL rotation was observed. Implantation of a toric PMMA IOL corrected high corneal **astigmatism** . Toric IOL technology with high **cylindrical** power allows enhancement of IOL surgery.

English Descriptors: Cataract; Surgery; Treatment; **Astigmatism** ;  
Complication; Intraocular **lens** ; Toric **lens** ; Biomaterial; Methyl methacrylate polymer; Case study; Human  
Broad Descriptors: Eye disease; **Lens** disease; Anterior **segment** disease; Vision disorder; Refractive error; Oeil pathologie; Cristallin pathologie

; **Segment** anterieur pathologie; Trouble vision; Trouble refraction  
oculaire; Ojo patologia; Cristalino patologia; **Segmento** anterior  
patologia; Trastorno vision; Trastorno refraccion ocular  
?

File 344:Chinese Patents Abs Aug 1985-2003/Nov  
(c) 2003 European Patent Office  
File 347:JAPIO Oct 1976-2003/Aug(Updated 031202)  
(c) 2003 JPO & JAPIO  
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200401  
(c) 2004 Thomson Derwent

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Set	Items	Description
S1	14892	CYLINDRIC? AND (LENS OR LENSES)
S2	647634	(FOUR OR 4 OR QUADRANT?) AND (PARTS OR SECTIONS OR SECTORS OR PARTITIONS OR SEGMENT?)
S3	524466	FOCUS
S4	33755	(NINETY OR 90) ( ) DEGREES
S5	4386	ASTIGMATISM
S6	722	S1 AND S2
S7	112	S6 AND S3
S8	1	S7 AND S4
S9	8	S7 AND S5
S10	8	S9 NOT S8
S11	5	S10 NOT (PHOTODETECT? OR PHOTSENSOR? OR LIGHTSENSOR? OR L- IGHT() SENSOR?)

8/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
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01331046 \*\*Image available\*\*  
RADIAL SKEW CORRECTING DEVICE OF DISK DEVICE

PUB. NO.: 59-042646 [JP 59042646 A]  
PUBLISHED: March 09, 1984 (19840309)  
INVENTOR(s): KOIZUMI AKIO  
YOSHITOSHI HIROSHI  
YANO HAJIME  
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 57-151242 [JP 82151242]  
FILED: August 31, 1982 (19820831)  
JOURNAL: Section: P, Section No. 284, Vol. 08, No. 144, Pg. 71, July  
05, 1984 (19840705)

#### ABSTRACT

PURPOSE: To eliminate a radial skew, by matching a **focus** at two different positions in the radial direction of a disk...

... light which is made incident to a disk 2 is reflected, passes through a  $\lambda/4$  plate 7 two times when going and returning, is returned to the midway, and the plane of polarization of light is rotated by **90 degrees**. Accordingly, the return light is reflected by a beam splitter 5, and thereafter, is made incident to a detector 11 through a convex **lens** 9 and a **cylindrical lens** 10. Five photodetecting **parts** 12-16 are formed on the detector 11. The photodetecting **parts** 12, 15 and 16 are all constituted of photodetectors A-D. Among them, an RF...

...of all photodetecting outputs of the detectors A-D of the photodetecting part 12. A **focus** detection by outputs of the element A-D of the photodetecting part 12 is used for **focus**-servo. The **focus** detection of the photodetecting **parts** 15, 16 are used for correcting a radial skew, and the disk 2 is driven so that the **focus** is matched at two different points in the radial direction of the disk 2, by...

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11/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06674207 \*\*Image available\*\*  
DEVICE AND METHOD FOR DETECTING **FOCUS** ERROR OF OPTICAL PICKUP

PUB. NO.: 2000-260033 [JP 2000260033 A]  
PUBLISHED: September 22, 2000 (20000922)  
INVENTOR(s): OGASAWARA MASAKAZU  
OTAKI MASARU  
YANAGISAWA TAKUMA  
APPLICANT(s): PIONEER ELECTRONIC CORP  
APPL. NO.: 11-059537 [JP 9959537]  
FILED: March 08, 1999 (19990308)

DEVICE AND METHOD FOR DETECTING **FOCUS** ERROR OF OPTICAL PICKUP

ABSTRACT

PROBLEM TO BE SOLVED: To provide a device and method for detecting a **focus** error of an optical pickup, resistant to being influenced by a track traverse noise and...

...permitting to use a three-beam system and a DPD system together.  
SOLUTION: In this **focus** error detecting method, a return light beam from an optical disk is divided into a 1st optical path P1 and a 2nd optical path P2 by a **lens** element 8 combining eccentric **cylindrical lenses** 31-34, and also an **astigmatism** is added to the light in each divided optical path, and a 1st detector 41 and a 2nd detector 42 having light-receiving **parts** divided in **four** by lightning-formed division lines receive and detect the light, and thus, a **focus** error signal is obtained by a prescribed arithmetic operation.

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11/3,K/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
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02666039 \*\*Image available\*\*  
OPTICAL PICK-UP

PUB. NO.: 63-282939 [JP 63282939 A]  
PUBLISHED: November 18, 1988 (19881118)  
INVENTOR(s): NOMURA HIROO  
KENMOCHI NOBUHIKO  
APPLICANT(s): SEIKO EPSON CORP [000236] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 62-118259 [JP 87118259]  
FILED: May 15, 1987 (19870515)  
JOURNAL: Section: P, Section No. 842, Vol. 13, No. 104, Pg. 41, March 13, 1989 (19890313)

ABSTRACT

... optical pick-up by using a simple constitution providing a double refraction prism, a converging **lens**, a **cylindrical lens** and a **four**-divided light detector...

...CONSTITUTION: A laser light flux is condensed through a collimator **lens**

2, a polarizing beam splitter 3, a mirror 4 and a lens 5 on an information recording support 6. The light from the support 6 is reflected ...

...and 0 to come out from the prism at a different angle are focused to parts 10a and 10b having a different divided type light detector by a lens 8. The differential of the output of detectors 10a and 10b is obtained by a...

...optical magnetic signal strong to a light quantity fluctuation noise can be detected. Further, a cylindrical lens 9 is placed in the same light path, the detector 10a is made into a four-divided type, and then, a focus servo signal by an astigmatism method can be also detected in the same light path.

11/3,K/3 (Item 3 from file: 347)  
DIALOG(R)File 347:JAPIO  
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01847140 \*\*Image available\*\*  
OPTICAL SYSTEM SIGNAL REPRODUCING DEVICE

PUB. NO.: 61-061240 [JP 61061240 A]  
PUBLISHED: March 29, 1986 (19860329)  
INVENTOR(s): KATASE YOSHIHIRO  
INOUE MASAYUKI  
SUGIYAMA TOSHIO  
OKUDA TADASHI  
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 59-182613 [JP 84182613]  
FILED: September 03, 1984 (19840903)  
JOURNAL: Section: P, Section No. 484, Vol. 10, No. 225, Pg. 122,  
August 06, 1986 (19860806)

#### ABSTRACT

PURPOSE: To make focus error detection by an astigmatism method with simple constitution that does not use a cylindrical lens by placing the first transparent parallel flat plate in the light path between a collimator lens and a light detector and slanting it to the optical axis ...

...it is placed in the state rotated by 45 deg. around the optic axis. A focus error signal is obtained by the difference of sum of detection output of detecting sections 10a, 10c of the first and third quadrants of a light detector 10 and the sum of detection output of detecting sections 10b, 10d of the second and fourth quadrants by astigmatism generated by the slanted parallel flat plate 8. A tracking error signal is obtained by a difference in detection output of light detectors 11, 12. An objective lens 6 is shifted in the direction (y) perpendicular to the direction (x) of recording tracks...

11/3,K/4 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014132537 \*\*Image available\*\*  
WPI Acc No: 2001-616748/200171

XRAM Acc No: C01-184719

XRPX Acc No: N01-460020

**Contact lens for toric lenses used for astigmatism , includes ballast portion with uniform thickness in horizontal cross- sections on portions of anterior face of lens body**

Patent Assignee: OCULAR SCI INC (OCUL-N)

Inventor: BACK A

Number of Countries: 096 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200175509	A1	20011011	WO 2001US9923	A	20010328	200171 B
AU 200147847	A	20011015	AU 200147847	A	20010328	200209
US 20020149742	A1	20021017	US 2000193493	P	20000331	200270
			US 2001818244	A	20010327	
			US 2002171718	A	20020614	
US 6467903	B1	20021022	US 2000193493	P	20000331	200273
			US 2001818244	A	20010327	
EP 1281099	A1	20030205	EP 2001920834	A	20010328	200310
			WO 2001US9923	A	20010328	
BR 200109734	A	20030204	BR 20019734	A	20010328	200318
			WO 2001US9923	A	20010328	
KR 2002087944	A	20021123	KR 2002713002	A	20020930	200320
CN 1432139	A	20030723	CN 2001810416	A	20010328	200365

Priority Applications (No Type Date): US 2001818244 A 20010327; US 2000193493 P 20000331; US 2002171718 A 20020614

Patent Details:

Patent No. Kind Lan Pg Main IPC Filing Notes

WO 200175509 A1 E 42 G02C-007/04

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200147847 A G02C-007/04 Based on patent WO 200175509

US 20020149742 A1 G02C-007/04 Provisional application US 2000193493

US 6467903 B1 G02C-007/04 Cont of application US 2001818244  
EP 1281099 A1 E G02C-007/04 Provisional application US 2000193493  
Based on patent WO 200175509

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

BR 200109734 A G02C-007/04 Based on patent WO 200175509

KR 2002087944 A G02C-007/04

CN 1432139 A G02C-007/04

**Contact lens for toric lenses used for astigmatism , includes ballast portion with uniform thickness in horizontal cross- sections on portions of anterior face of lens body**

Abstract (Basic):

... A contact **lens** comprises a non-axi-symmetric body with a thickness between anterior and posterior faces. A...

...on portion(s) of the anterior face and has a series of consecutive horizontal cross- sections with uniform thickness.

... A contact **lens** comprises a contact **lens** body having spherical base curvature with a convex anterior face, a concave posterior face, and...

...edge of the anterior face that is tapered thinner toward the peripheral edge of the **lens** . The body has a thickness between the anterior and posterior faces and is non-axi...

...the superior, intermediate, and inferior portion(s) and has a series of consecutive horizontal cross- **sections** exclusive of the peripheral zone and optic zone spanning a distance along the vertical meridian...

...For toric **lenses** used for **astigmatism** .

...

...The invention imposes a low-torque rotational correction on the **lens** and has improved thickness and ballast arrangement. It reduces the known variability of **lens** orientation from individual to individual, provides more effective interaction between stabilization mechanism and the eyelid...

...The figure shows a schematic front elevational view of the contact **lens**

#### Technology Focus:

TECHNOLOGY **FOCUS** - ...

...the inner zone and peripheral edge is less than 1.45 (preferably less than 1.4 ) mm and a rate of change of thickness in the tapered peripheral zone is less...

...The maximum thickness along a 225degrees meridian of the **lens** is 200-400, preferably 250-350 mum...

...A **cylindrical** correction is provided on the anterior face or preferably the posterior face...

...The inner zone is uniform radial width around the circumference of the **lens** .

...

...The body is a soft contact **lens** . The **lens** also incorporates a dynamic stabilization mechanism and a negative spherical power distance correction.

...Title Terms: **LENS** ;

11/3,K/5 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

004734788

WPI Acc No: 1986-238130/198636

XRPX Acc No: N86-177752

**Colour picture tube with in-line electron gun - has tube neck coating as one electrode and cylindrical apertured electrode with focus control**  
Patent Assignee: RCA CORP (RADC )

Inventor: ALIG R C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4590403	A	19860520	US 84646117	A	19840831	198636 B



Priority Applications (No Type Date): US 84646117 A 19840831

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4590403	A		6		

... has tube neck coating as one electrode and cylindrical apertured electrode with focus control

...Abstract (Basic): beam and two side beams, along coplanar paths toward a screen. The gun includes prefocus lens electrodes and main focus lens electrodes. The main focus lens is formed by two spaced electrode members. One of the electrodes forming the main focus lens is an internal conductive coating on the neck. The other electrode includes three parts .

...

...A cylindrical portion is smaller in diameter than the neck and is located in overlapped relation with...

...apertures which are aligned with the electron beam paths. A controller is located between the cylindrical and apertured portions for controlling the astigmatism of the focus of the two side beams...

...ADVANTAGE - Lowers focus lens aberration. (6pp Dwg.No. 4 / 4 )

...Title Terms: FOCUS ;

?

File 348:EUROPEAN PATENTS 1978-2003/Dec W02

(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20031225,UT=20031218

(c) 2003 WIPO/Univentio

? ds

Set	Items	Description
S1	5485	CYLINDRIC?(3N)(LENS OR LENSES)
S2	76414	(FOUR OR 4 OR QUADRANT?)(3N)(PARTS OR SECTIONS OR SECTORS - OR PARTITIONS OR SEGMENT?)
S3	59885	FOCUS
S4	30900	(NINETY OR 90)()DEGREES
S5	3459	ASTIGMATISM
S6	55	S1(S)S2
S7	17	S6(S)S3
S8	1	S7(S)S4
S9	7	S7(S)S5
S10	7	S9 NOT S8
S11	3	S10 NOT (PHOTODETECT? OR PHOTOSENSOR? OR LIGHTSENSOR? OR L- IGHT()SENSOR?)

8/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00473016 \*\*Image available\*\*

**A CAMERA WITH INTERNAL PRINTING SYSTEM**

**APPAREIL PHOTOGRAPHIQUE A SYSTEME D'IMPRESSION INTERNE**

Patent Applicant/Assignee:

SILVERBROOK RESEARCH PTY LIMITED,  
SILVERBROOK Kia,  
WALMSLEY Simon,  
LAPSTUN Paul,

Inventor(s):

SILVERBROOK Kia,  
WALMSLEY Simon,  
LAPSTUN Paul,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9904368 A1 19990128

Application: WO 98AU544 19980715 (PCT/WO AU9800544)

Priority Application: AU 978003 19970715; AU 978005 19970715; AU 978031  
19970715; AU 977991 19970715; AU 977998 19970715; AU 977988 19970715;  
AU 977993 19970715; AU 978012 19970715; AU 978017 19970715; AU 978014  
19970715; AU 978025 19970715; AU 978032 19970715; AU 977999 19970715;  
AU 978024 19970715; AU 978016 19970715; AU 978030 19970715; AU 977938  
19970715; AU 977997 19970715; AU 977979 19970715; AU 978015 19970715;  
AU 977978 19970715; AU 977982 19970715; AU 977989 19970715; AU 978019  
19970715; AU 977980 19970715; AU 977942 19970715; AU 978018 19970715;  
AU 978021 19970715; AU 978000 19970715; AU 977940 19970715; AU 977939  
19970715; AU 978020 19970715; AU 977985 19970715; AU 977987 19970715;  
AU 978022 19970715; AU 978029 19970715; AU 978023 19970715; AU 978028  
19970715; AU 978027 19970715; AU 978026 19970715; AU 977983 19970715;  
AU 977986 19970715; AU 977981 19970715; AU 977977 19970715; AU 977934  
19970715; AU 977990 19970715; AU 978497 19970811; AU 978505 19970811;  
AU 978498 19970811; AU 978504 19970811; AU 978501 19970811; AU 978500  
19970811; AU 978502 19970811; AU 978499 19970811; AU 979395 19970923;  
AU 979404 19970923; AU 979394 19970923; AU 979396 19970923; AU 979397  
19970923; AU 979398 19970923; AU 979399 19970923; AU 979400 19970923;  
AU 979401 19970923; AU 979402 19970923; AU 979403 19970923; AU 979405  
19970923; AU 97959 19971216; AU 981397 19980119; AU 982370 19980316; AU  
982371 19980316; AU 984094 19980612

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US  
UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE  
CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN  
GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 191348

Fulltext Availability:

Detailed Description

Detailed Description

... 12,288 bits, or 1.5K13 exactly. Since the VLIW Vector Processor 74  
consists of 4 identical PUs e.g 178 this equates to 6,144 bytes,  
exactly 6K13. Some of...

?

11/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01397631

**OPTICAL HEAD**

**OPTISCHER KOPF**

**TETE OPTIQUE**

**PATENT ASSIGNEE:**

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216883), 1006, Oaza-Kadoma,  
Kadoma-shi, Osaka 571-8501, (JP), (Applicant designated States: all)

**INVENTOR:**

ARAI, Akihiro, 6-2-1-1-504, Kizugawadai, Kizucho, Soraku-gun, Kyoto  
619-0225, (JP)

HAYASHI, Takao, 2-11-47, Uenonishi, Toyonaka-shi Osaka 560-0011, (JP)

NAKAMURA, Toru, 17-8, Fujigao 5-chome, Katano-shi Osaka 576-0022, (JP)

NAGATA, Takayuki, 1-37-501, Nakamiyakitamachi, Hirakata-shi Osaka  
573-1194, (JP)

**LEGAL REPRESENTATIVE:**

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1310951 A1 030514 (Basic)  
WO 2002001554 020103

APPLICATION (CC, No, Date): EP 2001941185 010622; WO 2001JP5366 010622

PRIORITY (CC, No, Date): JP 2000190893 000626; JP 2000214050 000714

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G11B-007/09; G11B-007/095

ABSTRACT WORD COUNT: 148

**NOTE:**

Figure number on first page: 0001

LANGUAGE (Publication,Procedural,Application): English; English; Japanese

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200320	2516
SPEC A	(English)	200320	21858
Total word count - document A			24374
Total word count - document B			0
Total word count - documents A + B			24374

...SPECIFICATION beam splitter 203, and are incident on the relay lens 206.

If for example, the **astigmatism** method is used as a **focus** detecting method, the relay lens 206 has refractive power equal to that of a **cylindrical lens** and thus sufficient to cause **astigmatism**, and guides the beams to the light receiving means 237. As shown in Figure 28

...

...the four-piece light receiving element 240 is received so as to be divided into **four parts**. A calculation is executed on the basis of the wire connection shown in the drawing...

11/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00373472

**Light detecting apparatus.**

Lichtfeststellungsvorrichtung.

Appareil pour la detection de la lumiere.

PATENT ASSIGNEE:

KABUSHIKI KAISHA TOSHIBA, (213130), 72, Horikawa-cho Saiwai-ku,  
Kawasaki-shi Kanagawa-ken 210, (JP), (applicant designated states:  
DE;FR;NL)

INVENTOR:

Ando, Hideo Intellectual Property Division, Toshiba Corporation 1-1,  
Shibaura 1-chome, Minato-ku Tokyo 105, (JP)

LEGAL REPRESENTATIVE:

BATCHELLOR, KIRK & CO. (100991), 2 Pear Tree Court Farringdon Road,  
London EC1R 0DS, (GB)

PATENT (CC, No, Kind, Date): EP 376708 A2 900704 (Basic)  
EP 376708 A3 911023

APPLICATION (CC, No, Date): EP 89313629 891228;

PRIORITY (CC, No, Date): JP 88327582 881227; JP 88327583 881227; JP  
88327584 881227; JP 88327580 881227

DESIGNATED STATES: DE; FR; NL

INTERNATIONAL PATENT CLASS: G11B-007/09;

ABSTRACT WORD COUNT: 62

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	680
SPEC A	(English)	EPABF1	7466
Total word count - document A			8146
Total word count - document B			0
Total word count - documents A + B			8146

...SPECIFICATION light from an optical disc is irradiated onto a photo detector, which is divided into **four** parts , with these **parts** combined in a square, via a **cylindrical lens** which generates **astigmatism** . This photo detector performs detection of focussing errors and generates **focus** error signals and reading information according to the area of light irradiated. In this detection...

...two focal lines which are formed in the direction of the generatrix generated by the **cylindrical lens** and the direction orthogonal to that generatrix. Detection of focussing errors signals and reading of...

11/3,K/3 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00366923

Optical head apparatus.

Anordnung fur einen optischen Kopf.

Dispositif de tete optique.

PATENT ASSIGNEE:

Oki Electric Industry Company, Limited, (225690), 7-12, Toranomom 1-chome  
Minato-ku, Tokyo 105, (JP), (applicant designated states: DE;FR;GB;NL)

INVENTOR:

Tanoshima, Katsuhide Oki Electric Industry Co. Ltd, 7-12, Toranomom  
1-chome, Minato-ku Tokyo, (JP)

Ohtsuka, Minoru Oki Electric Industry Co. Ltd, 7-12, Toranomom 1-chome,  
Minato-ku Tokyo, (JP)

Nagata, Shizuo Oki Electric Industry Co. Ltd, 7-12, Toranomom 1-chome,  
Minato-ku Tokyo, (JP)

Takahashi, Masahiro Oki Electric Industry Co. Ltd, 7-12, Toranomom  
1-chome, Minato-ku Tokyo, (JP)  
Shimizu, Yasuo Oki Electric Industry Co. Ltd, 7-12, Toranomom 1-chome,  
Minato-ku Tokyo, (JP)

LEGAL REPRESENTATIVE:

Read, Matthew Charles et al (47911), Venner Shipley & Co. 20 Little  
Britain, London EC1A 7DH, (GB)

PATENT (CC, No, Kind, Date): EP 350225 A2 900110 (Basic)  
EP 350225 A3 901219  
EP 350225 B1 940126

APPLICATION (CC, No, Date): EP 89306700 890630;

PRIORITY (CC, No, Date): JP 88169400 880707

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: G11B-007/08; G11B-007/085;

ABSTRACT WORD COUNT: 106

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	864
CLAIMS B	(German)	EPBBF1	804
CLAIMS B	(French)	EPBBF1	923
SPEC B	(English)	EPBBF1	3845
Total word count - document A			0
Total word count - document B			6436
Total word count - documents A + B			6436

...SPECIFICATION In addition, if a means for applying astigmatism to the  
light source, such as a **cylindrical lens** is disposed along the light  
path and the photodiodes 84 are divided into **four parts** (so-called  
astigmatic method), then a **focus** error signal can be generated.

Furthermore, the generator circuit 63 computes the difference between  
the...

?

File 9:Business & Industry(R) Jul/1994-2003/Dec 29  
     (c) 2003 Resp. DB Svcs.  
 File 15:ABI/Inform(R) 1971-2004/Jan 03  
     (c) 2004 ProQuest Info&Learning  
 File 16:Gale Group PROMT(R) 1990-2004/Jan 05  
     (c) 2004 The Gale Group  
 File 20:Dialog Global Reporter 1997-2004/Jan 05  
     (c) 2004 The Dialog Corp.  
 File 47:Gale Group Magazine DB(TM) 1959-2004/Dec 26  
     (c) 2004 The Gale group  
 File 75:TGG Management Contents(R) 86-2004/Dec W4  
     (c) 2004 The Gale Group  
 File 80:TGG Aerospace/Def.Mkts(R) 1986-2004/Jan 05  
     (c) 2004 The Gale Group  
 File 88:Gale Group Business A.R.T.S. 1976-2004/Jan 05  
     (c) 2004 The Gale Group  
 File 98:General Sci Abs/Full-Text 1984-2003/Nov  
     (c) 2003 The HW Wilson Co.  
 File 112:UBM Industry News 1998-2003/Dec 24  
     (c) 2003 United Business Media  
 File 141:Readers Guide 1983-2003/Nov  
     (c) 2003 The HW Wilson Co  
 File 148:Gale Group Trade & Industry DB 1976-2004/Jan 05  
     (c)2004 The Gale Group  
 File 160:Gale Group PROMT(R) 1972-1989  
     (c) 1999 The Gale Group  
 File 275:Gale Group Computer DB(TM) 1983-2004/Jan 05  
     (c) 2004 The Gale Group  
 File 264:DIALOG Defense Newsletters 1989-2004/Jan 05  
     (c) 2004 The Dialog Corp.  
 File 369:New Scientist 1994-2003/Dec W2  
     (c) 2003 Reed Business Information Ltd.  
 File 370:Science 1996-1999/Jul W3  
     (c) 1999 AAAS  
 File 484:Periodical Abs Plustext 1986-2003/Dec W3  
     (c) 2003 ProQuest  
 File 553:Wilson Bus. Abs. FullText 1982-2003/Nov  
     (c) 2003 The HW Wilson Co  
 File 570:Gale Group MARS(R) 1984-2004/Jan 05  
     (c) 2004 The Gale Group  
 File 608:KR/T Bus.News. 1992-2004/Jan 05  
     (c)2004 Knight Ridder/Tribune Bus News  
 File 620:EIU:Viewswire 2003/Dec 31  
     (c) 2003 Economist Intelligence Unit  
 File 613:PR Newswire 1999-2004/Jan 05  
     (c) 2004 PR Newswire Association Inc  
 File 621:Gale Group New Prod.Annou.(R) 1985-2004/Jan 05  
     (c) 2004 The Gale Group  
 File 623:Business Week 1985-2004/Jan 02  
     (c) 2004 The McGraw-Hill Companies Inc  
 File 624:McGraw-Hill Publications 1985-2004/Jan 05  
     (c) 2004 McGraw-Hill Co. Inc  
 File 634:San Jose Mercury Jun 1985-2003/Dec 31  
     (c) 2004 San Jose Mercury News  
 File 635:Business Dateline(R) 1985-2004/Jan 03  
     (c) 2004 ProQuest Info&Learning  
 File 636:Gale Group Newsletter DB(TM) 1987-2004/Jan 05  
     (c) 2004 The Gale Group  
 File 647:CMP Computer Fulltext 1988-2004/Dec W4  
     (c) 2004 CMP Media, LLC  
 File 696:DIALOG Telecom. Newsletters 1995-2004/Jan 04

(c) 2004 The Dialog Corp.  
File 674:Computer News Fulltext 1989-2003/Dec W3  
(c) 2003 IDG Communications  
File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
? ds

Set	Items	Description
S1	491	CYLINDRIC?(3N) (LENS OR LENSES)
S2	158448	(FOUR OR 4 OR QUADRANT?) (3N) (PARTS OR SECTIONS OR SECTORS - OR PARTITIONS OR SEGMENT?)
S3	4973602	FOCUS
S4	28826	(NINETY OR 90) ( ) DEGREES
S5	9604	ASTIGMATISM
S6	0	S1(S)S2
S7	82	S1(S)S3:S5
S8	55	S1(S)S3
S9	3	S8(S)S4
S10	8	S8(S)S5
S11	8	S9 OR S10
S12	6	RD S11 (unique items)



12/3,K/1 (Item 1 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.

05208701 SUPPLIER NUMBER: 21032047 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Troubleshooting CD-player startup problems. (compact disc)**  
Goldwasser, Sam  
Electronics Now, v69, n9, p25(4)  
Sep, 1998  
ISSN: 1067-9294 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 3594 LINE COUNT: 00258

... as described in the next paragraph.

5. The optical path in the pickup includes a **cylindrical lens** or **astigmatism** that causes the laser-beam spot to be circular when it is correctly focused, but...

...not. When it is not correctly focused, the major axis of the ellipse is offset **90 degrees**, depending upon whether the lens is too close or too far (e.g., major axis of -45 degrees for too close and +45 degrees for too far). **Focus** Error is equal to  $(A + D) - (B + C)$ , which will be 0 when **focus** is correct since, with the circular spot, the outputs of all four quadrants will be...

12/3,K/2 (Item 2 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.

05129132 SUPPLIER NUMBER: 20521481 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**CD information storage and playback. (compact disc)**  
Goldwasser, Sam  
Electronics Now, v69, n5, p23(4)  
May, 1998  
ISSN: 1067-9294 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 3384 LINE COUNT: 00254

... instead, and it is reflected by the polarizing beam splitter toward the photodiode array.)

A **cylindrical lens** slightly alters the horizontal and vertical focal distances of the resulting spot on the photodiode beam from the disc's information layer is used for servo control of **focus** and tracking, and for data recovery. The actual implementation could use an astigmatic objective lens rather than a separate **cylindrical lens** to reduce cost, but the effect is the same. Since the objective lens is molded...

...might have been a treat!). It is even possible that in some cases, the natural **astigmatism** of the laser diode itself plays a part in this process.

In essence, the optical...

12/3,K/3 (Item 1 from file: 141)  
DIALOG(R)File 141:Readers Guide  
(c) 2003 The HW Wilson Co. All rts. reserv.

03809169 H.W. WILSON RECORD NUMBER: BRGA98059169 (USE FORMAT 7 FOR FULLTEXT)  
**Troubleshooting CD-player startup problems.**  
Goldwasser, Sam.

Electronics Now (Electron Now) v. 69 no9 (Sept. '98) p. 25-8  
WORD COUNT: 3660

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

... as described in the next paragraph.

5. The optical path in the pickup includes a **cylindrical lens** or **astigmatism** that causes the laser-beam spot to be circular when it is correctly focused, but...

...not. When it is not correctly focused, the major axis of the ellipse is offset **90 degrees**, depending upon whether the lens is too close or too far (e.g., major axis of -45 degrees for too close and +45 degrees for too far). **Focus** Error is equal to  $(A + D) - (B + C)$ , which will be 0 when **focus** is correct since, with the circular spot, the outputs of all four quadrants will be...

**12/3,K/4 (Item 2 from file: 141)**  
DIALOG(R)File 141:Readers Guide  
(c) 2003 The HW Wilson Co. All rts. reserv.

03780696 H.W. WILSON RECORD NUMBER: BRGA98030696 (USE FORMAT 7 FOR FULLTEXT)

**CD information storage and playback.**

Goldwasser, Sam.

Electronics Now (Electron Now) v. 69 no5 (May '98) p. 23-6

WORD COUNT: 3381

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

... instead, and it is reflected by the polarizing beam splitter toward the photodiode array.)

A **cylindrical lens** slightly alters the horizontal and vertical focal distances of the resulting spot on the photodiode control of **focus** and tracking, and for data recovery. The actual implementation could use an astigmatic objective lens rather than a separate **cylindrical lens** to reduce cost, but the effect is the same. Since the objective lens is molded ...

...might have been a treat!). It is even possible that in some cases, the natural **astigmatism** of the laser diode itself plays a part in this process.

In essence, the optical...

**12/3,K/5 (Item 1 from file: 148)**  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2004 The Gale Group. All rts. reserv.

05123702 SUPPLIER NUMBER: 10408035 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Answering the need for WORM and rewritable optical storage: the Pioneer multifunction optical disk drive. (write once, read many times)**

Ekberg, Kent F.; Millet, Richard; Simpson, Cris

Optical Information Systems, v11, n1, p19(5)

Jan-Feb, 1991

ISSN: 0886-5809

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 2875

LINE COUNT: 00225

... beam pickup because there are no grooves to follow as there are in CCS systems.

**Focus** error is detected using an **astigmatism** method. One of the advantages of the SS format is that focussing is performed only...

...Because of this, there are none of the changes in diffraction patterns seen with CCS. **Astigmatism** is generated by a **cylindrical lens** in the return light path before the polarizing beam splitter. The **focus** error signal is generated by a quadrature photodetector.

The controller circuitry for the multifunction optical...

12/3,K/6 (Item 1 from file: 484)

DIALOG(R)File 484:Periodical Abs Plustext

(c) 2003 ProQuest: All rts. reserv.

03673457 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**The platform is the UI**

Holtzman, Jeff

Electronics Now (GRAD), v69 n5, p10-11+, p.3

May 1998

ISSN: 1067-9294 JOURNAL CODE: GRAD

DOCUMENT TYPE: Commentary

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1789

TEXT:

... instead, and it is reflected by the polarizing beam splitter toward the photodiode array.)

A **cylindrical lens** slightly alters the horizontal and vertical focal distances of the resulting spot on the photodiode...

...main return beam from the disc's information layer is used for servo control of **focus** and tracking, and for data recovery. The actual implementation could use an astigmatic objective lens rather than a separate **cylindrical lens** to reduce cost, but the effect is the same. Since the objective lens is molded...

...might have been a treat!). It is even possible that in some cases, the natural **astigmatism** of the laser diode itself plays a part in this process.

In essence, the optical...

?